

### **REMARKS**

Claims 1-92, 94-104, 106-115, 117-122, 134, 136-155, 157-167, 169-178, 180-185, 197-238, and 253-258 are now pending in the application. Claims 123-133, 135, 186-196, and 239-252 are cancelled without disclaimer or prejudice to the subject matter contained therein. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### **DRAWINGS**

The drawings stand objected to for certain informalities. In particular, the Examiner alleges that the drawings fail to disclose first and second wireless circuits. Applicants respectfully disagree.

For example, claim 123 recites “a first wireless circuit that communicates with said first oscillator” and “a second wireless circuit that communicates with said second oscillator.” Applicants respectfully note that FIG. 3 shows a wireless network communications device 48 that includes a plurality of circuits. In other words, **each of the plurality of circuits of the wireless device 48 are properly called wireless circuits.** This includes, for example, a baseband processor (BBP) 62, a media access controller (MAC) 64, and a radio frequency (RF) transceiver 52.

As such, Applicants respectfully submit that the drawings disclose first and second wireless circuits that communicate with first and second oscillators, respectively, as is recited in various claims.

### CLAIM OBJECTIONS

Claims 253-258 are objected to because of the following informalities: the term “wireless Ethernet network device” in line 16 should be corrected to --wireless device-- in order to be consistent with claim terminology. Applicants have amended the claims according to the Examiner’s suggestion.

### REJECTION UNDER 35 U.S.C. § 112

Claims 123-153, 186-216, 239-258 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed.

With respect to claims 123-133, 186-196, and 239-245, these claims are cancelled.

With respect to claims 134-153, 197-216, and 246-258, in view of the above remarks with respect to the objections to the drawings, Applicants respectfully submit that these claims are definite. In particular, Applicants respectfully submit that the first and second wireless circuits recited in the claims are clarified in the drawings and specification because any of the circuits of the wireless device 48 can properly be referred to as wireless circuits. In other words, the circuits **are inherently wireless circuits because they are included in a wireless device.**

## REJECTIONS UNDER 35 U.S.C. § 103

### GROUP I

Claims 1-4, 6, 8-9, 13-16, 18-22, 24-25, 31-35, 36, 38-39, 43-46, 48-52, 54-55, 61-64, 66, 68-69, 73-82, 74-76, and 78-85 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jokinen (U.S. Pat. No. 5,774,813) in view of Karaoguz (U.S. Pub. No. 2004/0029620) and Aoyama. This rejection is respectfully traversed.

With respect to claim 1, Applicants respectfully submit that the combination of Jokinen with Karaoguz and Aoyama is improper. At a minimum, the combination of Jokinen with Aoyama is improper.

Applicants respectfully note that it is impermissible to pick and choose from a reference in a disjointed and piecemeal manner as will support a given position to the exclusion of other parts necessary to the full appreciation of what the reference fairly teaches to one skilled in the art. *Bausch & Lomb, Inc. v. Barnes-Hind, Inc.*, 230 USPQ 416 (Fed. Circ. 1986). Here, the Examiner is picking and choosing only so much of Jokinen and Aoyama as will support the Examiner's position.

For example, Applicants' claim 1 recites a first voltage regulator that regulates supply voltage during the active mode and that is powered down during the low power mode, and **a second voltage regulator that dissipates less power than said first voltage regulator** and that regulates supply voltage during the low power mode. As shown in an exemplary embodiment in FIG. 3 of the present application, a wireless device includes voltage regulators 68 and 70 (i.e. a first voltage regulator) and a low power voltage regulator 98. The voltage regulators 68 and 70 are **powered down** during a low power mode. In contrast, the low power voltage regulator 98, which

dissipates less power than the other voltage regulators, is selected to supply voltage during the low power mode.

In other words, claim 1 specifically recites that a first (high power) voltage regulator is on in the active mode and off during the low power mode, and that a second (low power) voltage regulator is on during the low power mode.

Here, the Examiner acknowledges that Jokinen fails to disclose this limitation. For example, FIG. 4 of Jokinen discloses a first voltage regulator (e.g. one of REG 2, REG 3, and REG 4) and a second voltage regulator REG 1. Each of the regulators REG 2, 3, and 4 may be powered down during different modes, while the regulator REG 1 is powered on. Applicants respectfully note that Jokinen appears to be absent of any teaching or suggestion that the regulator REG 1 dissipates less power than any of the other regulators REG 2, 3, and 4.

Instead, Jokinen relies on the act of powering down the other regulators to reduce power consumption, **rather than switching to a second, low power regulator**. In other words, to provide a first voltage, Jokinen uses a combination of the voltage regulators to provide power. During a low power mode, Jokinen selectively turns off one or more of the voltage regulators to subtract that voltage regulator from the overall output. As such, a second low power regulator would be unnecessary in Jokinen, and Jokinen is absent of any teaching or suggestion the voltage regulator REG 1 dissipates less power than any of the other regulators.

The Examiner instead relies on FIG. 3 of Aoyama to disclose “a second voltage regulator that dissipates less power than said first voltage regulator,” but provides no evidence or support for this modification. As described above, Jokinen is directed to

using a plurality of voltage regulators simultaneously, and turning off selected ones of the voltage regulators to reduce power consumption. In other words, Jokinen already has a specific solution for reducing power consumption. Here, the Examiner alleges that one skilled in the art would be motivated to modify Jokinen with Aoyama “for the advantages of enabling respective units and circuits to maintain their operations while reducing power consumption.” (See Page 6 of the Office Action). Applicants respectfully note that Jokinen already provides a different structure to reduce power consumption.

As such, one skilled in the art presented with Jokinen, which **already provides a structure for reducing power consumption**, would have no reason to modify the device with Aoyama, which **provides a different structure for reducing power consumption**. Instead, the Examiner is picking and choosing from Jokinen and Aoyama only so much of these references as will support the Examiner’s position, which is impermissible.

Further, Applicants respectfully note that the Examiner still fails to provide any reference that discloses **a MAC device that selects said first voltage regulator during the active mode and said second voltage regulator during the low power mode**. Instead, the Examiner alleges that certain devices are “notoriously well known in the art...for their configuration in wireless Ethernet networks and that MAC devices are representative of Ethernet network devices.” (Page 5 of the Office Action). Applicants respectfully submit that a mere alleged **presence** of a MAC device is not an explicit or implicit disclosure that **the MAC device specifically, is selecting between the first and second voltage regulators**.

When evaluating claims for obviousness under 35 U.S.C. §103, all of the limitations must be considered and given weight. *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), MPEP § 2144.03. Here, it is clear that the Examiner has given little or no consideration of the limitation **and failed to give the limitation any weight**. For example, the Examiner cites Karaoguz, which includes a MAC device, but appears to be absent of any teaching or suggestion that the MAC device selects between **first and second voltage regulators**.

Applicants respectfully submit that claim 1 should be allowable for at least the above reasons. Claims 2-4, 6, 8-9, 13-16, 18-22, 24-25, 31-35, 36, 38-39, 43-46, 48-52, 54-55, 61-64, 66, 68-69, 73-82, 74-76, and 78-85 should be allowable for at least similar reasons.

## **GROUP II**

Claims 26-30, 56-60, and 86-90 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jokinen in views of Karaoguz and Aoyama. This rejection is respectfully traversed.

With respect to claim 26, Jokinen, either singly or in combination with Karaoguz and Aoyama, fails to show, teach, or suggest **a baseband processor comprising a first voltage regulator** that regulates supply voltage during the active mode and that is powered down during the low power mode **and a second voltage regulator** that dissipates less power than said first voltage regulator.

As shown in an exemplary embodiment in FIG. 3 of the present application, a wireless device 48 includes a baseband processor (BBP) 62. The BBP 62 includes

voltage regulators 68 and 70 and low power voltage regulator 98. In other words, **the BBP includes the first and second voltage regulators.**

None of the cited prior art references discloses this limitation. The Examiner acknowledges that Jokinen fails to specifically disclose a BBP. Instead, the Examiner relies on Karaoguz to disclose “a baseband processor...with active and low power modes.” Applicants respectfully note that **Karaoguz still fails to disclose that the alleged BBP includes the first and second voltage regulators** as Applicants’ claims recite.

Applicants respectfully submit that the Examiner fails to provide any reference that discloses that the BBP includes the first and second voltage regulators. Claim 26, as well as its dependent claims, should be allowable for at least the above reasons. Claims 56 and 86, as well as their corresponding dependent claims, should be allowable for at least similar reasons.

#### **GROUPS III-IV**

Claims 91-92, 101-102, 154-155, 164-165, 217-218, and 224-225 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kohlschmidt (U.S. Pat. No. 6,029,061) in view of Amos (U.S. Patent No. 6,934,870). Claims 103-104, 106-107, 111-113, 166-167, 169-170, 174-176, 226-228, and 231-232 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kohlschmidt in views of Amos and Aoyama. These rejections are respectfully traversed.

With respect to claim 91, Kohlschmidt, either singly or in combination with Amos, fails to show, teach, or suggest a baseband processor (BBP) **that communicates with said oscillator and said RF transceiver and that performs RF mixing.**

As shown in an exemplary embodiment in FIG. 3 of the present application, a wireless device 48 includes a BBP 62. The BBP 62 communicates with an RF transceiver 52. More specifically, the BBP 62 communicates with the RF transceiver 52 to perform RF mixing as claim 91 recites.

As best understood by Applicants, Kohlschmidt fails to disclose this limitation. For example, neither of the processors 104 and 105, which the Examiner relies on to disclose a BBP, communicates with the alleged RF transceiver 106. Further, Kohlschmidt appears to be absent of any teaching or suggestion that either of the processors 104 and 105 performs RF mixing.

Applicants respectfully submit that claim 91, as well its dependent claims, should be allowable for at least the above reasons. Claims 103, 154, 166, 217, and 226, as well as their corresponding dependent claims, should be allowable for at least similar reasons.

#### **GROUP V, VII, AND VIII**

Claims 114-115, 120-122, 177-178, 183-185, 233-234, and 237-238 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kohlschmidt in views of Amos and Aoyama. Claims 134-135, 137, 139-143, 197-198, 200, 202-206, and 246-251 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kohlschmidt in view of Aoyama. Claims 145-146, 151-152, 208-209, 214-215, 253-254, and 257 are rejected



under 35 U.S.C. 103(a) as being unpatentable over Kohlschmidt in view of Aoyama. These rejections are respectfully traversed.

With respect to claim 114, the alleged combination fails to disclose a shutdown module that shuts down said first oscillator **and said first voltage supply** in said low power mode. For example, the Examiner relies on FIG. 3 of Aoyama to disclose a first voltage supply Vdd. Applicants respectfully note that the voltage supply Vdd is continuously supplied to the step-down circuits 1 and 2. In other words, the alleged first voltage supply Vdd is not shut down during the low power mode as Applicants' claim 114 recites.

Applicants respectfully submit that claim 114, as well as its dependent claims, should be allowable for at least the above reasons. Claims 134, 145, 177, 197, 208, 233, and 253, as well as their corresponding dependent claims, should be allowable for at least similar reasons.

Claims 246-252 are cancelled.

#### **GROUP VI**

Claims 123, 129-130, 132, 186, 192-193, 195, 239, and 242-244 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kohlschmidt. This rejection is respectfully traversed.

Applicants cancelled claims 123-133, 186-196, and 239-245. As such, this rejection is rendered moot.


## CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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By: \_\_\_\_\_

  
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